REMARKS

Claims 1-12 are currently pending and at issue.

Applicants want to thank the Examiner for the withdrawal of the prior rejections based on JP 10-089870, and for the acknowledgment that "it cannot be ascertained whether or not the reference discloses locating the assemblage of plate fins and tube runs on a supporting surface with the tube runs edges contacting the supporting surface, and the fins above and out of contact with the supporting surface."

Applicants respectfully traverse all of the rejections of the claims based on DE 852249 to Schild, including the rejections under §102, the rejections under §103, the rejection under §103in view of JP 10-089870, the rejection under §103in view of JP 05-099581, and the rejection under §103 in view of U.S. Patent No. 4,860,822 to Sacks. In summary, all of the rejections are improper because Schild taken by itself or in combination with any or all of the references relied on in the rejections, simply fails to show or suggest the method recited in the claims.

Each of the independent claims, claims 1, 8 and 12 recite a step of locating an assemblage of plate fins and tube runs on a supporting surface with the tube run edges contacting the supporting surface, and the fins above and out of contact with the supporting surface. This step is neither shown nor suggested in

Schild and none of the other references relied on in the rejection add anything to overcome the failings of Schild.

In this regard, the Office Action attempts to overcome the obvious shortcoming of Schild by arguing that Schild recognizes that plate fins are "extremely thin and sensitive [to] mechanical damages." However, this recognition is simply not sufficient to infer, let alone show inherency for, the step recited in each of claims 1, 8 and 12. *See* MPEP §2112, IV, stating that "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic," and that "to establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference,'" and further that "inherency, may not be established by probabilities or possibilities," and even further that "[t]he mere fact that certain things may result from a given set of circumstances is not sufficient." In an attempt to overcome the shortcomings of the above quoted statement regarding mechanical damage in Schild, the Office Action references U.S. Patent No. 1,913,175 as a prior art reference over which Schild is improving. However, Schild does not state, or even infer, that it is improving over the assembly fixture used in U.S. Patent No. 1,913,175. Rather, at best, Schild asserts that its product (not its method of assembly), is superior to the product of U.S. Patent No. 1,913,175 because the product of Schild does not have plate fin edges which "tower above the outside round

ranges of the flat oval crosswise cut." Again, there is nothing in this statement that would show that the tube blocks of Schild would **necessarily** have to be supported on the exposed tube edges. Furthermore, there is simply nothing in Schild that would discourage the use of fixtures such as shown in U.S. Patent No. 1,913,175, which would clearly protect the "extremely thin and sensitive [to] mechanical damages" fins because, as seen in Figs. 12 and 13 of U.S. Patent No. 1,913,175, the fixtures surround the fins with protective structure. It cannot be fairly argued that the fins of Schild would be less subject to damage without the protective, support structure provided by the fixtures of U.S. Patent No. 1,913,175. Quite to the contrary, it must be admitted under any fair analysis that the fins of Schild would be subject to much more potential damage absent a protective fixture such as is provided in U.S. Patent No. 1,913,175, then with such fixtures.

Even if the fixtures of U.S. Patent No. 1,913,175 are ignored, there is nothing in Schild U.S. Patent No. 1,913,175, or any of the other references that would encourage one skilled in the art to orient a heat exchanger core so that it could be supported on the tube edges, let alone to actually support the heat exchanger core on the tube edges, rather than by any of the other structural surfaces provided by the heat exchanger core. Because there are so many ways to support a tube block core, such as disclosed in Schild, it cannot seriously be argued that support of the heat

exchanger core on the tube edges **necessarily** occurs in Schild, such as required to establish a rejection on inherency.

Furthermore, each of the independent claims recite a step of subjecting the assembly to a brazing temperature in the absence of brazing fixtures holding the tube runs and the fins in assembled relation. Again, this step is not shown or suggested in Schild and none of the other references relied on in the rejection add anything in this regard. Specifically, Schild is silent with respect to brazing in the absence of brazing fixtures. The Office Action attempts to improperly imply from this silence that somehow there is a disclosure of the step recited in the claims. Specifically, the Office Action asserts that "there is no disclosure by Schild that there is a need for any brazing fixture holding the fins and runs in assembled relations." This assertion is completely insufficient to establish a rejection under either §102 or §103 and Applicants are unaware of any rule of examination that would allow the Examiner to infer the step recited in Applicants' claims based on the **silence** of Schild with respect to whether or not Schild required the use of fixtures during brazing. In an attempt to bolster the shortcomings of Schild and the above quoted assertion, the Office Action continues by asserting that "the plate fins are first pushed into place on the tubing runs and that spacing is insured by necks ("rag" in German), just like Applicant." First, there is the obvious problem that this statement relies on Applicants' disclosure as a means for interpreting the disclosure of Schild. Applicants'

disclosure is clearly not prior art and the reliance in the Office Action on Applicants' disclosure to interpet Schild is completely improper. Second, even with Applicants' disclosure, the use of "necks" is hardly sufficient grounds to infer that Schild would not have used a brazing fixture. To the extent that the Office Action is relying on inherency, it falls completely short of the standards set forth in MPEP §2112. It is undeniable that Schild does not exclude the possibility of using fixtures during brazing, such as is known, and it is equally undeniable that Schild could be brazed using a brazing fixture. In short, there is nothing in Schild or the other references that provides a sufficient grounds for rejection, or a sufficient grounds for inferring, let alone for inherency, that "the assembly is manufactured just like Applicants' invention" as asserted in the Office Action. In this regard, Applicants note that *In re Best* does not support a rule that if the structure of a prior art reference is the same or nearly the same as that of a structure created by a process recited in a claim, it can be inferred that the process used to make the product in the prior art is the same as the process in the claim. This is simply not the rule of law established by *Best*, nor do any of the quotations of *Best* in MPEP §2112 support such a rule.

Additionally, claim 1 recites the step of subjecting the assembly to brazing temperatures . . . while the assembly is on the supporting surface. Again, this is neither shown nor suggested by Schild and none of the other references relied on in the rejection add anything in this regard. To the extent that Schild discusses any

sort of brazing, it discusses dip brazing, with no mention whatsoever how the tube block is supported during the dip brazing. This silence simply cannot be construed as disclosing the step recited in claim 1 because there are any number of ways to support a tube block during dip brazing and there is simply nothing that the Examiner has cited or referred to which would show that it is inherent that the dip brazing in Schild would be performed as recited in claim 1. For example, it is common for dip brazing operations to be performed by suspending the part from a hook as it is dipped into the braze. Clearly, such a procedure does not anticipate or suggest the step recited in Applicants' claims.

Claims 8 and 12 recite a step including subjecting the assembly to brazing temperatures . . . for a time sufficient to allow the fins to settle under gravitational forces onto the tube runs. Again, Schild fails to disclose or suggest such a step and the other references relied on in the rejection add nothing in this regard. The Office Action asserts that "the fins **may** settle under gravitational forces onto the tube runs" (emphasis added). By its own terms this statement fails to satisfy the requirements for establishing inherency. Specifically, by expressly using the word "may", the assertion is an admission that it is not **necessarily so** that the fins will settle under gravitational forces onto the tube runs, as is required for establishing inherency. Accordingly, for this additional reason, the rejections of claims 8 and 12 and their dependent claims is improper.

In view of the foregoing, Applicants respectfully request reconsideration of the rejection of the claims and allowance of the case.

Respectfully submitted,

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